

# Subcommittee on Spatial Water Data

## Meeting Details:

Date/Time: December 18, 2015, 1:00 - 3:00 PM Eastern Time

Location: Teleconference only (administered from USGS Headquarters, 12201 Sunrise Valley Drive, Reston, VA 20192)

Conference Line: 703-648-4848  
From non-DOI locations, dial toll free 855-547-8255  
Conference code 1712-0464#

### JOIN WEBEX MEETING

When it is time to attend the meeting, please visit this link:

<https://usgs.webex.com/usgs/j.php?MTID=m9d6f264cf4268301448e8625ad8ea6a8>

Meeting number: 716 325 658

Shared document space:

<https://drive.google.com/open?id=0B877MDsx9pIFTmpocGE1d0M4TVE&authuser=0>

## Agenda

All Times Eastern Time Zone

- 1:00 - 1:10 Introductions for new attendees
- 1:10 - 1:40 Discussion
- 1:40 - 2:10 Work Group Reports
- 2:10 - 2:20 New Issues
- 2:20 - 2:30 Adjourn

## Attendees:

### New (did not attend 8/28/14 or later meeting)

Steve Malers ([steve.malers@openwaterfoundation.org](mailto:steve.malers@openwaterfoundation.org))

### Returning (attended 8/28/14 or later meeting)

Al Rea ([ahrea@usgs.gov](mailto:ahrea@usgs.gov))  
Kernell Ries ([kries@usgs.gov](mailto:kries@usgs.gov))  
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Tad Slawecki ([tad@limno.com](mailto:tad@limno.com))

## Of Interest:

<https://max.gov/> (Collaboration site that looks interesting, but seems to be limited to govt employees only.).

<https://github.com/Quartz/bad-data-guide>

<https://pcjericks.github.io/py-gdalogr-cookbook/> Can we build something like this for hydro data?

<http://owi.usgs.gov/R/> USGS R (stats package) community

1:00 - 1:10 Introductions for new attendees

1:10 - 1:40 Discussion

1:40 - 2:10 Work Group Reports

## NHDPlus Data Workgroup:

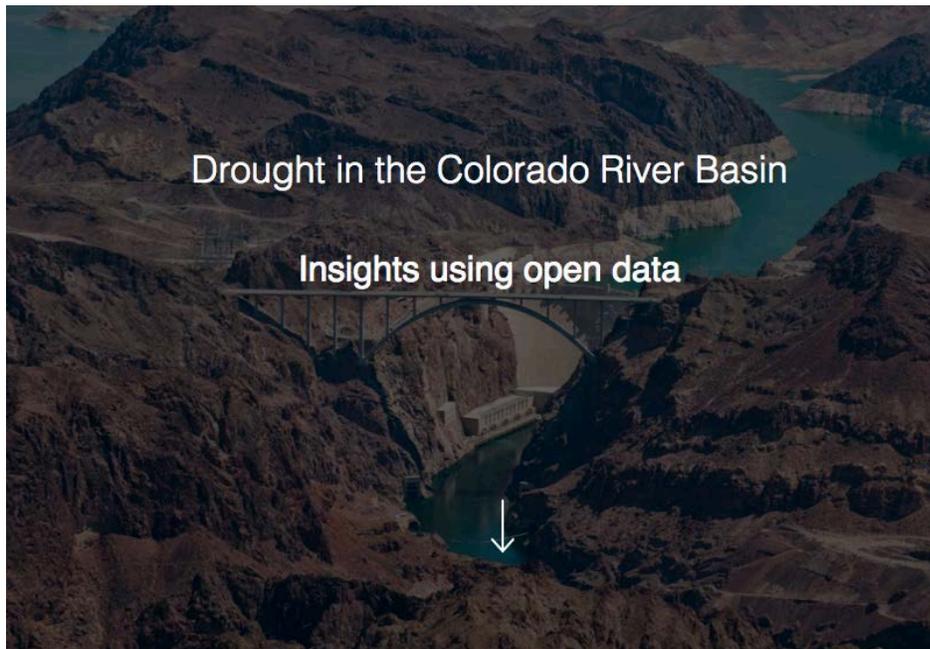
The NHDPlus team would like feedback on the proposed revisions to the national geodatabase. Please provide feedback by next Wednesday, December 23rd. Here is some more info about the proposed revisions:

In March 2015, the NHDPlus team released a draft version of NHDPlus 2.1 as a seamless national geodatabase in support of the NFIE effort. This version provides a single national geodatabase to simplify data management, which has also been denormalized (flattened) to make many feature attributes directly accessible from the feature geometries for ease of use. In preparation for our first production release of the seamless national geodatabase, we are soliciting feedback from users of this data. The March data, along with a User Guide dated

July 10, and component version document dated May 7, are available at: <ftp://ec2-54-227-241-43.compute-1.amazonaws.com/NHDplus/OWDI/>

Note you'll probably need FTP client software to download the geodatabase itself, which is 6.4 GB.

A draft of a new User Guide, containing updates suggested by the NHDPlus team and others users, is available [here](#) as a Google Doc. Please look it over and provide us with your feedback. We're proposing to drop quite a few fields that we think may not be particularly useful in the national geodatabase version. (Note that the complete NHDPlus V2.1 content is still available in our standard regional shapefile/grid format.) In particular, we welcome your thoughts on which flow estimates to include in the national geodatabase format. We've cut back from all six flow estimates to just the "A" (runoff), "C" (reference gage regression-best estimate of "natural flows"), and "E" (gage adjusted-best estimate of actual flows) for the Mean Annual Flows, and we'd like to know how useful you find these three flow estimates, and whether you'd like us to include these flow estimates for monthly flows as well, which would add 72 fields for 3 flows and 3 velocities for each month. Please add your comments/suggestions right in the Google Doc. If you have used the March national geodatabase, and would like to see the differences between the User Guide that matches that gdb, and the current proposal, see that [here](#). Also note that the geodatabase matching this modified User Guide has not been produced yet, but will be made available after we complete this feedback cycle. Please provide feedback in the [document](#) (or by email to Tommy Dewald).



## Drought Use Case Team

First iteration of the drought tool was launched Wednesday 12/16.  
Here are some relevant links:

- **Website:** <https://www.doi.gov/water/owdi.cr.drought/en/>

- [DOI news release](#)
  - There have been tweets, posts from DOI, BOR and USGS, and will be more today and possibly tomorrow. AP picked up the articles, and there have been sporadic articles around the US.
  - Supposed to be a more in-depth article next week.
  - Possibly footage in future version of This Week at Interior.
- **Github site:** <https://github.com/USGS-CIDA/OWDI-Lower-Colorado-Drought-Vis>
  - You can look at/fork the code, source data, etc. from that website
- **New ESRI Drought Tool available from the viz:** <http://livingatlas.arcgis.com/drought/>
  - Thanks to Steve Kopp and Daniel Siegel for the ability to link to this tool
- **Visitors/Use:** as of yesterday, we had visitors from around the world; we'd reached 25,000 visitors so far.
  - Posting to Reddit seems to have drawn a lot of traffic to the site.

Big thanks to all members of the team.



## Spill Response Work Group

A study was performed and a paper (submitted to the Journal of Hydrology) was written on “**Calibration of a toxic spill model for the Gold King mine spill**”

The issues addressed in this paper include the flow regime, source term describing the spill event, use of real-time stream flow, and comparison of model results to observations. The article also discusses issues with data availability, calibration of national level toxic spill models, and procedures for model calibration. The calibrated model can be used for further analysis of the fate and transport of the contaminated plume. The approach, data, and tools developed for calibration of the spill models are general and can be applied to any spill. The Incident Command Tool for Drinking Water Protection (ICWater) was used to model time-of travel and concentration of manganese. Downstream tracing was initiated at the spill site to forecast the

location of the leading edge, peak concentration and trailing edge of the plume for drinking water intakes and sampling locations as far downstream as 260 miles.

**ICWater version 3.4** will be released in January 2016 - includes a model calibration tool, updated source term calculator for transportation and tank spills

### **Technology Network Linked Data Index Work Group:**

[Archived the Technology Work Group Content.](#)

[Starting Network Linked Data Index Work Group content here.](#)

Numerous conversations have been had offline, via email, and in ad-hoc documents.

[Requirements are being collected in bulk here.](#)

[Formal design work is being organized here.](#)

## **Water Use Data Workgroup -**

Received the results of national survey on state water use programs conducted by the Interstate Council on Water Policy (ICWP) on behalf of USGS' Water Use and Data Research (WUDR) financial assistance program. 33 states returned the survey and WSWC has information for 8 more, so 41 out of 50 states now have an assessment of their programs. Survey is pretty big, so still parsing it out. Planning to put together a Sciencebase resource for the state data, will sit alongside the resources listed for regional groups, and federal agencies. Adding more GIS data to the Sciencebase folder for the workgroup.

## **2:10 - 2:20 New Issues**

Heads up - GeoPlatform release of service monitoring service ~ February time frame

HY\_Features - Presentation by Dave Blodgett

Dave will give a more detailed presentation next meeting

## **2:20 - 2:30 Adjourn**

## **Next Meeting Jan 22**